Rule 1.26 - Requirements for Hydraulic Fracture Stimulation –Report of Shooting or Treating

1. Definitions

For the purposes of this Rule, the following definitions shall apply:

- a. "Board" means the Mississippi State Oil and Gas Board.
- b. "Additive" means any substance or combination of substances, including proppants, having a specified purpose which is intentionally combined with the Base Fluid as hereinafter defined.
- c. "Base Fluid" means the continuous phase fluid, such as water, which is used in a particular Hydraulic Fracturing Treatment.
- d. "Chemical Abstract Service" or "CAS" means the chemical registry which is the authoritative collection of disclosed chemical substance information.
- e. "Chemical Constituent" means a discrete chemical with its own specific name or identity (such as, but not necessarily, a CAS number) which is contained in an Additive.
- f. "Chemical Family" means a group of elements in the Periodic Table or, more commonly, compounds which share certain physical and chemical characteristics and which have a common name.
- g. "Hydraulic Fracturing Fluid" means the Base Fluid and Additives utilized in a particular Hydraulic Fracturing Treatment.
- h. "Hydraulic Fracturing Treatment" means stimulating a well by the application of Hydraulic Fracturing Fluids with force in order to create artificial fractures in the formation for the purpose of improving the capacity of the well to produce hydrocarbons.
- i. "Supervisor" means the State Oil and Gas Supervisor of the Mississippi State Oil and Gas Board.
- 2. The provisions of this Rule shall apply to oil and gas wells which are proposed to undergo a temporary or intermittent hydraulic fracturing procedure to improve the productive capacity of such oil and gas wells utilizing Hydraulic Fracturing Treatment as hereinabove defined.

- 3. Before an operator shall commence the hydraulic fracturing of any oil and gas well, including the application of Hydraulic Fracturing Treatment as hereinabove defined, such operator shall file with the Mississippi State Oil and Gas Board a duly executed **FORM 2** indicating in the narrative portion of such FORM 2 the nature of the hydraulic fracturing procedure proposed to be conducted. No such hydraulic fracturing procedure shall commence prior to the approval of such permit application. Operator shall provide the Mississippi State Oil and Gas Board Field Inspector with not less than forty-eight (48) hours notice in advance of the commencement of any Hydraulic Fracturing Treatment.
- 4. Operators applying for a permit to commence Hydraulic Fracturing Treatment of any oil or gas well shall state clearly such intent on the FORM 2 submitted to the Mississippi State Oil and Gas Board in accordance with Paragraph 5 below.
- 5. The permit application described in the preceding paragraphs shall, at a minimum, include:
 - (A.) The following information on the existing or proposed casing program, demonstrating that the well will have steel alloy casing designed to withstand the anticipated maximum injection pressures to which the casing will be subjected in the well:
 - (1) Whether the well is or will be a vertical well, a directional well or a horizontal well; and
 - (2) The estimated true vertical and measured production casing setting depths in the well; and
 - (3) The casing grade and minimum internal yield pressure for the existing or proposed production casing used in the well; and
 - (4) The surface casing shall be set at least 100.0 feet below the Base Underground Source of Drinking Water ("BUSDW") and cemented to the surface or the intermediate or production string casing shall have cement to the surface starting 100.0 feet below the BUSDW or the operator shall use tubing and packer to perform the Hydraulic Fracturing Treatment.
 - (B.) The following information demonstrating that the well has or will

have sufficient cement volume and integrity to prevent the movement of Base Fluids and Additives up-hole into the various casing or well bore annuli:

- (1) The existing or proposed cement minimum compressive strength; and
- (2) The known or estimated top of cement for the production casing string.
- (C.) The anticipated surface treating pressure range for the proposed Hydraulic Fracturing Treatment. The production casing described in subparagraph 5.(A.) above shall be sufficient to contain the maximum anticipated treating pressure of the proposed Hydraulic Fracturing Treatment which shall not exceed the API minimum internal yield pressure for such production casing.
- 6. Within thirty (30) days following the completion of the Hydraulic Fracturing Treatment, the operator shall, for the purpose of disclosure, report the following information to the Supervisor regarding such procedure utilizing a duly executed **FORM 3 ("Completion Report"):**
 - (A.) The maximum pump pressure measured at the surface during each stage of the Hydraulic Fracturing Treatment unless reasonable grounds for confidentiality exist in which event a request for confidentiality may be submitted to the Supervisor who shall be authorized to waive the disclosure of such data for a period of six (6) months and for an additional six (6) months upon written request to the Supervisor at the Supervisor's sole discretion; and
 - (B.) The types and volumes of the Base Fluids and Additives used for each stage of the Hydraulic Fracturing Treatment expressed in gallons or pounds; and
 - (C.) The calculated fracture height as designed to be achieved during the Hydraulic Fracturing Treatment and the estimated TVD to the top of the fracture; and
 - (D.) A list of all Additives used during the Hydraulic Fracturing Treatment specified by general type, such as acids, biocides, breakers, corrosion inhibitors, cross-linkers, demulsifiers, friction reducers, gels, iron controls, oxygen scavengers, pH adjusting agents, scale inhibitors, proppants and surfactants; and

- (E.) For each additive type listed under subparagraph 6.(D.) above, the specific trade name and suppliers of all the Additives utilized during the Hydraulic Fracturing Treatment; and
- (F.) If the operator causes any Additives to be used during the Hydraulic Fracturing Treatment not otherwise disclosed by the person performing such treatment, the operator shall disclose a list of all Chemical Constituents and associated CAS numbers contained in such Additives that are subject to the requirements of 29 CFR 1910.1200(g)(2); and
- (G.) A list of Chemical Constituents intentionally added to the Base Fluids which are subject to the requirements of 29 CFR Section 1910.1200(g)(2) and their associated CAS numbers; and
- (H.) The maximum ingredient concentrations within the Additive expressed as a percent by mass for each chemical ingredient listed under subparagraph 6.(G.) above; and
- (I.) The maximum concentration of each chemical ingredient listed under subparagraph 6.(G.) above expressed as a percent by mass of the total volume of Hydraulic Fracturing Fluids utilized.
- 7. Notwithstanding subparagraph 6.(G.) above, if the specific identity of a Chemical Constituent and the Chemical Constituent's associated CAS number are claimed to be a trade secret, or have been finally determined to be entitled to protection as a trade secret under 29 CFR Section 1910.1200(i), the entity entitled to make such a claim may withhold the specific identity of the Chemical Constituent and the Chemical Constituent's associated CAS number from the list required to be reported by subparagraph 6.(G.) above. If the entity entitled to make such a claim elects to withhold the information, the report must:
 - (A.) Disclose the Chemical Family associated with the ingredient; and
 - (B.) Include a statement that a claim of trade secret protection has been made by the entity entitled to make such a claim.
- 8. An operator will not be responsible for reporting information that is not provided to them due to a claim of trade secret protection by the entity entitled to make such a claim.
- 9. Nothing contained in Paragraph 7 above shall authorize any person to withhold information which is required by state or federal law to be provided to a health

care professional, a doctor or a nurse for the purpose of diagnosis or treatment of a medical condition and it is further stated that any health care professional, a doctor or a nurse receiving such information is required to maintain it as confidential.

10. In lieu of submitting to the Supervisor on the FORM 3 (Completion Report) the information regarding the Hydraulic Fracturing Treatment prescribed in Paragraph 6 of this Rule, the operator of an oil and gas well may furnish to the Supervisor a FORM 3 containing a statement signifying that the required information has been submitted to the Ground Water Protection Council Hydraulic Fracturing Chemical Registry (http://fracfocus.org) or any other similar registry, in accordance with their requirements. In any event, the operator shall submit to the Supervisor on a FORM 3 a list of the chemicals used in the Hydraulic Fracturing Treatment.

Authority: MCA Section 53-1-17(3) (1972)

Approved: January 16, 2013

Effective Date: March 4, 2013

Rule 1.26 - Requirements for Hydraulic Fracture Stimulation –Report of Shooting or Treating

1. Definitions

For the purposes of this Rule, the following definitions shall apply:

- b. "Board" means the Mississippi State Oil and Gas Board.
- b. "Additive" means any substance or combination of substances, including proppants, having a specified purpose that is combined with an Hydraulic Fracturing Fluid which is intentionally combined with the Base Fluid as hereinafter defined.
- c. "Base Fluid" means the continuous phase fluid, such as water,
 which is used in a particular Hydraulic Fracturing Treatment
- e. d. "Chemical Abstract Service" or "CAS" means the chemical registry which is the authoritative collection of disclosed chemical substance information.
- d. e. "Chemical Constituent" means a discrete chemical with its own specific name or identity (such as, but not necessarily, a CAS number) which is contained in an additive.
- e. <u>f.</u> "Chemical Family" means a group of elements in the Periodic Table or, more commonly, compounds which share certain physical and chemical characteristics and which have a common name.
- f. g. "Hydraulic Fracturing Fluid" means the base fluid type Base Fluid and Additives utilized in a particular Hydraulic Fracturing Treatment;
- g. h. "Hydraulic Fracturing Treatment" means stimulating a well by the application of Hydraulic Fracturing Fluids and Additives with force in order to create artificial fractures in the formation for the purpose of improving the capacity of the well to produce hydrocarbons.
- h. i. "Supervisor" means the State Oil and Gas Supervisor of the Mississippi State Oil and Gas Board.
- 2. The provisions of this Rule shall apply to oil and gas wells which are proposed to undergo a temporary or intermittent hydraulic fracturing

procedure to improve the productive capacity of such oil and gas wells utilizing Hydraulic Fracturing Treatment as hereinabove defined. Wells utilizing the underground injection with force of fluids and propping agents designed to create artificial fractures in the formation. For the purposes of this Rule, these hydraulic fracturing procedures are collectively referred to as Hydraulic Fracturing Treatment.

- 3. Before any person an operator shall commence the hydraulic fracturing of any oil and gas well, including the application of Hydraulic Fracturing Treatment as hereinabove defined, such person operator shall file with the Mississippi State Oil and Gas Board a duly executed **FORM 2** indicating in the narrative portion of such FORM 2 the nature of the hydraulic fracturing procedure proposed to be conducted. No such hydraulic fracturing procedure shall commence prior to the approval of such permit application. Operator shall provide the Mississippi State Oil and Gas Board Field Inspector with not less than forty-eight (48) hours notice in advance of the commencement of any Hydraulic Fracturing Treatment.
- 4. Persons Operators applying for a permit to commence the hydraulic fracturing Hydraulic Fracturing Treatment of any oil and gas well, including the application of Hydraulic Fracturing Treatment, shall state clearly such intent on the FORM 2 submitted to the Mississippi State Oil and Gas Board in accordance with Paragraph 5 below.
- 5. The permit application described in the preceding paragraphs shall, at a minimum, include:
 - (J.) The following information on the existing or proposed casing program, demonstrating that the well will have steel alloy casing designed to withstand the anticipated maximum injection pressures to which the casing will be subjected in the well:
 - (5) Whether the well is or will be a vertical well, a directional well or a horizontal well; and
 - (6) The estimated true vertical and measured production casing setting depths in the well; and
 - (7) The casing grade and minimum internal yield pressure for the existing or proposed production casing used in the well. and
 - (8) The surface casing shall be set at least 100.0 feet below the Base Underground Source of Drinking Water ("BUSDW") and cemented to the surface or the intermediate or production string casing shall have cement to the surface

starting 100.0 feet below the BUSDW or the operator shall use tubing and packer to perform the Hydraulic Fracturing Treatment.

- (K.) The following information demonstrating that the well has or will have sufficient cement volume and integrity to prevent the movement of fracture fluids Base Fluids and Additives up-hole into the various casing or well bore annuli:
 - (3) The existing or proposed cement minimum compressive strength; and
 - (4) The known or estimated top of cement for the production casing string.
- (L.) The anticipated surface treating pressure range for the proposed Hydraulic Fracturing Treatment. The production casing described in subparagraph 5.(A.) above shall be sufficient to contain the maximum anticipated treating pressure of the proposed Hydraulic Fracturing Treatment which shall not exceed 80% of the API minimum internal yield pressure for such production casing.
- 6. Within thirty (30) days following the completion of the Hydraulic Fracturing Treatment, the <u>permit holder operator</u> shall, for the purpose of disclosure, report the following information to the Supervisor regarding such procedure utilizing a duly executed **FORM 3 ("Completion Report"):**
 - (C.) The maximum pump pressure measured at the surface during each stage of the Hydraulic Fracturing Treatment <u>unless reasonable</u> grounds for confidentiality exist in which event a request for confidentiality may be submitted to the Supervisor who shall be authorized to waive the disclosure of such data for a period of six (6) months and for an additional six (6) months upon written request to the Supervisor at the Supervisor's sole discretion; and
 - (D.) The types and volumes of the Hydraulic Fracturing Fluids and proppants

 Base Fluids and Additives used for each stage of the Hydraulic Fracturing

 Treatment expressed in gallons or pounds; and
 - (C.) The calculated fracture height as designed to be achieved during the Hydraulic Fracturing Treatment and the estimated TVD to the top of the fracture; and
 - (D.) A list of all Additives used during the Hydraulic Fracturing Treatment specified by general type, such as acids, biocides, breakers, corrosion inhibitors, cross-linkers, demulsifiers, friction reducers, gels, iron controls, oxygen scavengers, pH adjusting agents, scale inhibitors, proppants and

- surfactants; and
- (E.) For each additive type listed under subparagraph 6.(D.) above, the specific trade name and suppliers of all the Additives utilized during the Hydraulic Fracturing Treatment; and
- (F.) If the permit holder operator causes any Additives to be used during the Hydraulic Fracturing Treatment not otherwise disclosed by the person performing such treatment, the permit holder operator shall disclose a list of all Chemical Constituents and associated CAS numbers contained in such Additives subject to the trade secret requirements hereinafter set forth; that are subject to the requirements of 29 CFR 1910.1200(g)(2); and
- (G.) A list of ehemical ingredients contained in the Hydraulic Fracturing Fluids
 Chemical Constituents intentionally added to the Base Fluids which are
 subject to the requirements of 29 CFR Section 1910.1200(g)(2) and their
 associated CAS numbers; and
- (H.) The maximum ingredient concentrations within the Additive expressed as a percent by mass for each chemical ingredient listed under subparagraph 6.(G.) above; and
- (I.) The maximum concentration of each chemical ingredient listed under subparagraph 6.(G.) above expressed as a percent by mass of the total volume of Hydraulic Fracturing Fluids utilized.
- 7. Notwithstanding subparagraph 6.(G.) above, if the specific identity of a chemical ingredient Chemical Constituent and the chemical ingredient's Chemical Constituent's associated CAS number are claimed to be a trade secret, or have been finally determined to be entitled to protection as a trade secret under 29 CFR 1910.1200(i), the entity entitled to make such a claim may withhold the specific identity the chemical ingredient Chemical Constituent and the chemical ingredient's Chemical Constituent's associated CAS number from the list required to be reported by subparagraph 6.(G.) above. If the entity entitled to make such a claim elects to withhold the information, the report must:
 - (C.) Disclose the Chemical Family associated with the ingredient; and
 - (D.) Include a statement that a claim of trade secret protection has been made by the entity entitled to make such a claim.
- 8. An operator will not be responsible for reporting information that is not provided to them due to a claim of trade secret protection by the entity entitled to make such a claim.
- 9. Nothing contained in paragraph 7 above shall authorize any person to withhold information which is required by state or federal law to be provided to a health

care professional, a doctor or a nurse <u>for the purpose of diagnosis or treatment</u> <u>of a medical condition and it is further stated that any health care professional, a doctor or a nurse receiving such information is required to maintain it as <u>confidential</u>.</u>

10. The operator of an oil and gas well may furnish to the Supervisor a statement signifying that the required information has been submitted to the Ground Water Protection Council Hydraulic Fracturing Chemical Registry (http://fracfocus.org) or any other similar registry, provided that all such information is accessible to the public free of charge, to satisfy some or all of the information requirements of this Rule. In lieu of submitting to the Supervisor on the FORM 3 (Completion Report) the information regarding the Hydraulic Fracture Stimulation Treatment prescribed in Paragraph 6 of this Rule, the operator of an oil and gas well may furnish to the Supervisor a FORM 3 containing a statement signifying that the required information has been submitted to the Ground Water Protection Council Hydraulic Fracturing Chemical Registry (http://fracfocus.org) or any other similar registry, in accordance with their requirements. In any event, the operator shall submit to the Supervisor on a FORM 3 a list of the chemicals used in the Hydraulic Fracturing Treatment.

Authority: MCA Section 53-1-17(3) (1972)